

Application No.: 10/075,840

3

Docket No.: 495812001400

ENTRY  
UNDER  
1.1/6  
NOT APPROVED  
80 99-2004

AMENDMENTS TO THE CLAIMS

Claim 1 (Currently Amended): A method for monitoring diffraction while recording a hologram, comprising:

- generating a source beam;
- generating a data beam by projecting a first component of the source beam through a data source, the data beam having a first polarization;
- generating a reference beam by adjusting a polarization of a second component of the source beam to provide a second polarization;
- recording a hologram in a holographic medium from an interference between the data beam and the reference beam; and
- measuring an offset component in an output arm of the data beam used for recording the hologram.

Claim 2 (Original): A method as claimed in claim 1, further comprising:

- determining an output power from the offset component;
- determining an input power corresponding to an input arm of the reference beam; and
- determining a diffraction efficiency from the output power and the input power.

Claim 3 (Original): A method as claimed in claim 2, further comprising: monitoring the diffraction efficiency to determine a termination condition for recording the hologram.

Claim 4 (Original): A method as claimed in claim 1, further comprising:

- determining an output power from the offset component; and

sf-1746530